

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	5	("5819292" "5857207" "6016553" "6101585" "6324654").PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 14:26
S2	2	09/876993	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2006/02/10 16:29
S3	438	incremental adj backup	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2006/02/10 16:29
S4	372	S3 and (@rlad<="20030708" @ad<="20030708")	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 15:16
S5	5	((("6934877") or ("6915315") or ("6848037") or ("6732244") or ("5381545")).PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	OFF	2006/02/13 14:28
S6	1	("20030074378").PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	OFF	2006/02/13 14:28
S7	5	((("20030074378") or ("20030081468") or ("20040143713") or ("20050114285") or ("20020178173")).PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	OFF	2006/02/13 15:13
S8	83	"5835953"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 15:13
S9	83	S8 and (@rlad<="20030708" @ad<="20030708")	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 15:16
S10	42	S9 and increment\$3	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2006/02/13 15:17

[Protecting file systems: A survey of backup techniques - group of 4 »](#)

AL Chervenak, V Vellanki, Z Kurmas - NASA, 1998 - [pdb.eng.uiowa.edu](#)

... Faster and smaller backups can be achieved using an **incremental backup** scheme, which copies only those files that have been created or modified since a ...

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A Tridgell - Doktorarbeit, Australian National University, 1999 - [cri.ensmp.fr](#)

... ber of related algorithms for text compression, differencing and **incremental backup**.

iv Page 6. Contents Acknowledgments ... 90 5.3 **Incremental backup** systems . . .

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[CITATION] [The File Motel—An Incremental Backup System for Unix](#)

A Hume - Summer USENIX Conference Proceedings, 1988

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NC Hutchinson, S Manley, M Federwisch, G Harris, D ... - OPERATING SYSTEMS REVIEW, 1998 - [usenix.org](#)

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S Quinlan, S Dorward - FAST, 2002 - [db.usenix.org](#)

... The implementation, however, resembles an **incremental backup** because the snapshots and the active file system share any blocks that remain unmodified; a ...

Cited by 78 - [Web Search](#)

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Z Kurmas, AL Chervenak - IEEE Symposium on Mass Storage Systems, 2000 - [cis.gvsu.edu](#)

... once every period or epoch specified by an algorithm), this scheme copies only those files that have changed since the last **incremental backup** to the backup ...

Cited by 3 - [View as HTML](#) - [Web Search](#) - [BL Direct](#)

[Designing a fast, on-line backup system for a log-structured file system - group of 10 »](#)

RJ Green, AC Baird, JC Davies - Digital Technical Journal, 1996 - [research.compaq.com](#)

... The backup system achieves this level of performance without compromising functionality such as **incremental backup** or fast, selective restore. Introduction. ...

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[How to Build a Trusted Database System on Untrusted Storage - group of 4 »](#)

U Maheshwari, R Vingralek, W Shapiro - OSDI, 2000 - [usenix.org](#)

... An **incremental backup** of a partition is created with respect to a previous snapshot, the base, and contains the data chunks that were created, updated, or ...

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[Efficient distributed backup with delta compression - group of 9 »](#)

RC Burns, DDE Long - The 1997 5 th Workshop on I/O in Parallel and Distributed ..., 1997 - [almaden.ibm.com](#)

... Early efforts to reduce the amount of data to be backed up produced a simple optimization, **incremental backup**, which backs up only those files that have been ...
[Cited by 23](#) - [View as HTML](#) - [Web Search](#)

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M Kaczmarski, T Jiang, DA Pease - IBM SYSTEMS JOURNAL, 2003 - research.ibm.com
... Minimizing network traffic: Progressive **incremental backup**. ... Figure 2 Figure 2.
Incremental backup processing is shown in the first column. ...
[Cited by 9](#) - [Cached](#) - [Web Search](#) - [BL Direct](#)

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S Quinlan - Software - Practice and Experience, 1991 - h7.dion.ne.jp
... The time to write all dump blocks to the WORM is expected to be similar to an **incremental backup** of a regular file system to a similar performance media. ...
[Cited by 28](#) - [View as HTML](#) - [Web Search](#)

The Amanda network backup manager - group of 8 »

J Da Silva, Ó Gudmundsson - 1993 - portal.acm.org
... conf). Each filesystem will normally get a full backup once within this cycle, and an **incremental backup** every other night. The ...
[Cited by 10](#) - [Web Search](#) - [Library Search](#)

pStore: A secure peer-to-peer backup system - group of 12 »

C Batten, K Barr, A Saraf, S Trepetin - Unpublished report, MIT Laboratory for Computer Science, ..., 2001 - dsl.upc.es
... In an effort to combine research in peer-to-peer systems with techniques for **incremental backup** systems, we propose pStore: a secure distributed backup system ...
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An Empirical Analysis of Web Page Revisitation - group of 6 »

B McKenzie, A Cockburn - PROCEEDINGS OF THE ANNUAL HAWAII INTERNATIONAL CONFERENCE ON ..., 2001 - usa.cosc.canterbury.ac.nz
... incremental backups. At our institution any file that is modified during the day is copied into the **incremental backup**. Copies ...
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The HADES File Server - group of 2 »

H Reuter - Proc. Eleventh IEEE Symposium on Mass Storage Systems, ..., 1991 - ieeeexplore.ieee.org
... backup file migrated B file B C file C erased, incremental file D new backup file 2nd night: all new or modified files are copied into an **incremental backup** file. ...
[Cited by 2](#) - [Web Search](#)

ADSM: A Multi-Platform, Scalable, Backup and Archive Mass Storage System - group of 6 »

LF Cabrera, R Rees, S Steiner, W Hineman - COMPCON-IEEE-DIGEST OF PAPERS AND PROCEEDINGS-, 1995 - doi.ieeeecs.org
... on-line indices to store all appropriate metadata, ADS M preserves these performance characteristics regardless of the number of **incremental backup** operations. ...
[Cited by 7](#) - [Web Search](#) - [Library Search](#) - [BL Direct](#)

Overview of the Spirallog file system - group of 10 »

JE Johnson, WA Laing - Digital Technical Journal, 1996 - research.compaq.com
... data. We achieved this degree of success without compromising such functionality as **incremental backup** or fast, selective restore. ...
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Defining a Quality Model for Mail Servers - group of 3 »

JP Carvallo, X Franch, C Quer - LECTURE NOTES IN COMPUTER SCIENCE, 2003 - Springer

... Protocols, that Single Copy Store contributes positively to Average Response Time but that this last attribute is damaged by Online **Incremental Backup** policies ...
[Cited by 13](#) - [Web Search](#) - [BL Direct](#)

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K Noervaag, K Bratbergsengen - SCCC, 1997 - doi.ieeecs.org
... The sequential writing of the log, with timestamped segments, also makes on-line and **incremental backup** easy. To take a **incremental** ...
[Cited by 3](#) - [Web Search](#)

[Designing for disasters - group of 6 »](#)

K Keeton, C Santos, D Beyer, J Chase, J Wilkes - Proc. FAST, 2004 - hpl.hp.com
... snapshot copy data to tape resync (resilver) backup copy create snapshot atomically full backup **incremental backup** Figure 3: the backup cycle. Page 6. ...
[Cited by 9](#) - [View as HTML](#) - [Web Search](#)

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1 [A log file design for analyzing secondary storage occupancy](#)



H. Pat Artis

September 1981

ACM SIGMETRICS Performance Evaluation Review , Proceedings of the 1981 ACM SIGMETRICS conference on Measurement and modeling of computer systems SIGMETRICS '81, Volume 10 Issue 3

Publisher: ACM Press

Full text available: pdf(491.98 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A description of the design and implementation of a log file for analyzing the occupancy of secondary storage on IBM computer systems is discussed. Typical applications of the data contained in the log are also discussed.

2 [Linux and the PalmPilot](#)



Michael J. Hammel

June 1998 **Linux Journal**

Publisher: Specialized Systems Consultants, Inc.

Full text available: html(18.65 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This article contains all the information you need to run Linux on the Palm Pilot personal digital assistant

3 [High speed on-line backup when using logical log operations](#)



David B. Lomet

May 2000

ACM SIGMOD Record , Proceedings of the 2000 ACM SIGMOD international conference on Management of data SIGMOD '00, Volume 29 Issue 2

Publisher: ACM Press

Full text available: pdf(220.69 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Media recovery protects a database from failures of the stable medium by maintaining an extra copy of the database, called the backup, and a media recovery log. When a failure occurs, the database is "restored" from the backup, and the media recovery log is used to roll forward the database to the desired time, usually the current time. Backup must be both fast and "on-line", i.e. concurrent with on-going update activity. Conventional online backup sequentially copies ...

4 [Adaptive programming in JAsCo](#)



Wim Vanderperren, Davy Suvée, Bart Verheecke, María Agustina Cibrán, Viviane Jonckers



March 2005 **Proceedings of the 4th international conference on Aspect-oriented software development AOSD '05**

Publisher: ACM Press

Full text available: [pdf\(355.00 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

In this paper we propose an extension to JAsCo for supporting Adaptive Programming in a Component-Based Software Development context. JAsCo is an aspect-oriented programming language targeted at Component-Based Software Development and allows encapsulating crosscutting concerns using highly reusable aspect beans. Adaptive Programming on the other hand, allows capturing crosscutting concerns by structure-shy adaptive visitors. We propose to implement an adaptive visitor as a regular JAsCo aspect ...

Keywords: JAsCo, adaptive programming, aspect-oriented software development, component-based software development

5 Tar and Taper for Linux: Learn to use tar and the friendly taper archival tools.

Yusuf Nagree

February 1996 **Linux Journal**

Publisher: Specialized Systems Consultants, Inc.

Full text available: [html\(33.29 KB\)](#) Additional Information: [full citation](#), [index terms](#)



6 Strong loss tolerance of electronic coin systems



Birgit Pfitzmann, Michael Waidner

May 1997 **ACM Transactions on Computer Systems (TOCS)**, Volume 15 Issue 2

Publisher: ACM Press

Full text available: [pdf\(267.29 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Untraceable electronic cash means prepaid digital payment systems, usually with offline payments, that protect user privacy. Such systems have recently been given considerable attention by both theory and development projects. However, in most current schemes, loss of a user device containing electronic cash implies a loss of money, just as with real cash. In comparison with credit schemes, this is considered a serious shortcoming. This article shows how untraceable electronic cash can be m ...

Keywords: Byzantine faults, electronic cash, payment systems, privacy

7 Mobile services: Reincarnating PCs with portable SoulPads



Ramón Cáceres, Casey Carter, Chandra Narayanaswami, Mandayam Raghunath

June 2005 **Proceedings of the 3rd international conference on Mobile systems, applications, and services MobiSys '05**

Publisher: ACM Press

Full text available: [pdf\(199.97 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

The ability to walk up to any computer, personalize it, and use it as one's own has long been a goal of mobile computing research. We present *SoulPad*, a new approach based on carrying an auto-configuring operating system along with a suspended virtual machine on a small portable device. With this approach, the computer boots from the device and resumes the virtual machine, thus giving the user access to his personal environment, including previously running computations. *SoulPad* ha ...

8 Documentation tools: Documentation meets version control: an automated backup



system for HTML-based help

Robin Green

September 2000 **Proceedings of IEEE professional communication society international professional communication conference and Proceedings of the 18th annual ACM international conference on Computer documentation: technology & teamwork**

Publisher: IEEE Educational Activities Department

Full text available:  [pdf\(449.11 KB\)](#) Additional Information: [full citation](#), [abstract](#)

Software developers have used version control systems for years, to manage source code changes and to enable them to reproduce any given level of their software from the source code that created it. Most writing departments, however, tend to perform full-scale weekly backups at best, or tempt fate at worst. The two major reasons for this neglect of document version control are lack of adequate tools and the effort required by writers to deal with the inadequate tools presently available. This pa ...

9 Efficient distributed backup with delta compression



Randal C. Burns, Darrell D. E. Long

November 1997 **Proceedings of the fifth workshop on I/O in parallel and distributed systems**

Publisher: ACM Press

Full text available:  [pdf\(1.37 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

10 Creating a culture of technical caution: addressing the issues of security, privacy protection and the ethical use of technology



Judith Oates Lewandowski

November 2005 **Proceedings of the 33rd annual ACM SIGUCCS conference on User services SIGUCCS '05**

Publisher: ACM Press

Full text available:  [pdf\(59.00 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper focuses upon the infusion of basic security and cyberethics principles within the curriculum of a required technology integration course for pre-service teachers. By using a prescribed list of content and the relevant curricular modules, the students are exposed to these principles within a similar context they will encounter as a K-12 educator.

11 Progress report: Brown university instructional computing laboratory



Marc H. Brown, Robert Sedgewick

January 1984 **ACM SIGCSE Bulletin , Proceedings of the fifteenth SIGCSE technical symposium on Computer science education SIGSCE '84**, Volume 16 Issue 1

Publisher: ACM Press

Full text available:  [pdf\(1.15 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

An instructional computing laboratory, consisting of about 60 high-performance, graphics-based personal workstations connected by a high-bandwidth, resource-sharing local area network, has recently become operational at Brown University. This hardware, coupled with an innovative courseware/software environment, is being used in the classroom in an attempt to radically improve the state of the art of computer science pedagogy. This paper describes the current state of the project. T ...

12 A minicomputer network management monitoring and analysis system using APL



Fred A. Gross, James C. Taylor

January 1987 **ACM SIGAPL APL Quote Quad , Proceedings of the international conference on APL: APL in transition APL '87**, Volume 17 Issue 4

Publisher: ACM Press

Full text available:  pdf(494.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This article describes an integrated group of utilities distributed about an eleven super-minicomputer network for such purposes as mediating network-wide file backup without user intervention, centralized verification of all archival processes, centralized monitoring and analysis of network and individual node statistics, general system housekeeping, and notification of systems staff of trouble spots (particularly security and system use growth behavior). This facility uses APL (the Data G ...

13 Kernel korner: ATA over ethernet: putting hard drives on the lan

Ed L. Cashin

June 2005 **Linux Journal**, Volume 2005 Issue 134

Publisher: Specialized Systems Consultants, Inc.

Full text available:  html(23.76 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

¿

14 The SNet model: access, security and e-services for students



Anand Padmanabhan

September 2003 **Proceedings of the 31st annual ACM SIGUCCS conference on User services**

Publisher: ACM Press

Full text available:  pdf(313.83 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper will explore the SNet model that Hunter College of the City University of New York developed and implemented. During the Spring of 2002, CUNY as a central organization (3rd largest in the country) envisioned a plan and strategy to enhance e-services to all their students, faculty and administrators. From this 'master' vision, Hunter College designed and derived the SNet model to provide efficient and effective services to students. This model not only looks at just providing eServices ...

Keywords: SNet, communication, eServices, email, higher education, information technology, model, wireless


15 An analysis of XML database solutions for the management of MPEG-7 media descriptions



Utz Westermann, Wolfgang Klas

December 2003 **ACM Computing Surveys (CSUR)**, Volume 35 Issue 4

Publisher: ACM Press

Full text available:  pdf(448.76 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#), [review](#)

MPEG-7 constitutes a promising standard for the description of multimedia content. It can be expected that a lot of applications based on MPEG-7 media descriptions will be set up in the near future. Therefore, means for the adequate management of large amounts of MPEG-7-compliant media descriptions are certainly desirable. Essentially, MPEG-7 media descriptions are XML documents following media description schemes defined with a variant of XML Schema. Thus, it is reasonable to investigate current ...

Keywords: MPEG-7, XML database systems, multimedia databases

16 Disaster recovery planning for academic computing centers

Renate Rohde, Jim Haskett

June 1990 **Communications of the ACM**, Volume 33 Issue 6



Publisher: ACM Press

Full text available: pdf(691.04 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#), [review](#)

Planning for recovery from a disaster is quickly becoming recognized as a necessity for higher education computing installations. This article presents a structural framework, describes the stages, and tells how to implement a disaster recovery plan specifically geared to an academic computing organization.

Keywords: backup files, recovery, system management

17 [Teaching of assembly language as a laboratory science](#)



D. J. Weiner

December 1989 **ACM SIGCSE Bulletin**, Volume 21 Issue 4

Publisher: ACM Press

Full text available: pdf(501.75 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

This paper describes our experience with the implementation of laboratories associated with our undergraduate computer science courses. The beginning assembly language course was chosen as our first experiment with this concept for several reasons. Acquisition of new equipment necessitated reorganization of the course in any case, and the philosophy of learning by experimentation was most easily implemented in a subject "close to the hardware". The concept of a supervised lab in computer science, ...

18 [Coordination with scopes](#)



Iain Merrick, Alan Wood

March 2000 **Proceedings of the 2000 ACM symposium on Applied computing - Volume 1**

Publisher: ACM Press

Full text available: pdf(687.10 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: Linda, coordination, tuplespaces

19 [Backup Strategy](#)



Malcolm Murphy

February 1996 **Linux Journal**

Publisher: Specialized Systems Consultants, Inc.

Full text available: html(14.98 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

Malcolm tells us which files to backup and how often

20 [Linux Means Business](#)



Lester Hightower, Hank Leininger

February 1998 **Linux Journal**

Publisher: Specialized Systems Consultants, Inc.

Full text available: html(17.15 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

United Railway Signal Group, Inc.: The story of how Progressive Computer Concepts has turned United Railway into a Linux shop